

## TITLE

Implementing a Preliminary Risk Communication Strategy for Community-Appropriate Messages

## THEME

Disseminating Information to Guide Policy, Practice and Actions to Improve the Nation's Health

## KEYWORDS

risk communication, risk perception

## BACKGROUND

Risk communication informs and educates communities about potential health risks and environmental hazards, however, risk communicators often present information that does not address the gap between a community's perception of an environmental risk and the existing scientific data pertaining to that risk. Additionally, the public's perception of environmental hazards often influences the priorities and legislative agendas of regulatory agencies such as the U.S. Environmental Protection Agency, underscoring the need for research in this area. One way to address this problem is through a multi-stage risk communication strategy.

## OBJECTIVE(S)

To use a community's health and environmental concerns as a means for implementing a multi-stage risk communication strategy.

## METHOD(S)

This research builds upon an ongoing pilot study to develop environmental and health education messages for a fenceline community in Norco, Louisiana. In 2003, Norco residents (n=334) completed and returned a health and environmental perception mail survey. Residents were presented with 15 different health issues and 18 environmental factors. For each health issue and environmental factor, respondents were asked to indicate their level of concern using a four-point rating scale (no concern at all, not much of a concern, somewhat of a concern, and a major concern). Responses were collapsed into two categories; category 1: no to not much of a concern, and category 2: somewhat to a major concern. Category two responses provided the basis for the creation of a multi-stage risk communication strategy in Norco.

## RESULT(S)

The first stage of the communication strategy identified the residents' health and environmental concerns through a mail survey. Socioeconomic variables that influenced these concerns were also identified. As measured by odds-ratio estimates, household income was the socioeconomic variable consistently associated with increased levels of health and environmental concerns. Other relevant predictors of concern included age, sex, education and the number of years of community residence. Additionally, 52% of survey respondents identified pamphlets or brochures as a trusted source of information about environmental problems. Stage 2 involved the implementation of a one-year risk communication initiative that entailed mailing monthly fliers to every household in Norco, addressing the respondents' top six health and

six environmental concerns. Stage 3 is currently underway to assess how residents received the risk communication messages using a short mail survey and focus groups.

## **DISCUSSION/RECOMMENDATION(S)**

In accordance with other studies, this research illustrates how socioeconomic variables may influence an individual's concern about health and the environment. Understanding these influences is essential when developing community-appropriate risk communication messages. Therefore, further study in this area is needed to: 1) create a strategy for risk communicators who wish to understand the importance of community perception prior to developing their communication messages; and 2) evaluate how risk communication messages are received by the community (or audience for which they are intended).

## **AUTHOR(S)**

LuAnn E. White, Ph.D., D.A.B.T.  
Director  
Research Associate  
Tulane Center of Excellence  
Tulane School of Public Health and Tropical Medicine  
1430 Tulane Ave., TW-43  
New Orleans, LA 70112  
504-988-1774  
[lawhite@tulane.edu](mailto:lawhite@tulane.edu)

Margot T. Brown, M.S.P.H.: [mbrown4@tulane.edu](mailto:mbrown4@tulane.edu)  
Elizabeth C. Langlois, M.S.P.H.: [Langlois@tulane.edu](mailto:Langlois@tulane.edu)  
Jeffery G. Shaffer, M.S.: [jshaffer@tulane.edu](mailto:jshaffer@tulane.edu)

